The Logger's Bark
RADIO CLUB of TACOMA

January, 2019 VOLUME 16, ISSUE 1 ©Radio Club of Tacoma W7DK

2019 – Another New Year Upon Us

Happy New Year everyone! I hope you all had a safe, relaxing and fulfilling Holiday Season to conclude your 2018. Anne and mine was uneventful – and we're finally pretty much moved into our new Port Orchard home, with antennas in place (thanks to all the help from various members last summer!). It's still amazing to wake up every morning to see the wonders of nature right in our own yard, contrasted to December 25th 2017, when we were covered in several inches of fresh fallen Christmas snow.

So a new year is indeed upon us. We closed out 2018 with a wonderful awards banquet at "the other Tacoma Eagles Club" – with a tremendous turnout I have to say. Another one of the great send-offs of the old year is always our tradition of Straight Key Night on New Year's Eve in the W7OS museum. I had the pleasure of being the first operator at the newly redone museum station and what a treat it was! Like walking into a ham shack around the year I was born (1961). Rich KR7W and Randy WB4SPB really polished the museum up in style and it wasn't lost on the operators, myself included. In my stint as first op, I worked three stations in succession, in what would become the trend for the evening: mini pileups! I also snagged the "best DX" with a contact in Detroit Lakes, Minnesota on 80 meters. The key I used for my time on the air is featured in another article in this Bark issue: a homemade key lent to me by Steve AD7VL who hand assembled it almost ten years ago. It performed perfectly, and it went home with me to finish out the event from my own station.

Plans are already underway for the many exciting radio-related events for the new year: bunny hunts, Field Day, our annual picnic, and a host of other fun things to attend or do. As the guy who also wears the hat for Program Manager, I have a number of top quality and hopefully very informative guest speakers and presenters lined up who will entertain and educate our members during upcoming general meetings. Be watching future issues of the Logger's Bark for updates and presentation topics.

THE PRESIDENT'S CORNER

DAVE W7UUU

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Don't Forget!

Lunch Sandwiches are now served before the General Meeting. $6.00 Choice of Ham, Turkey, or Egg salad.

We are also finishing out our year with the first eight months of using Eagles Aerie #3 as our meeting place on the first Saturday of the month. And I have to say it's working out really well indeed. I think most have become accustomed to the room layout and how it works for us. Of course, for the January general meeting, for the first time we also brought in a lunch menu, with Eagles Aerie kitchen manager Kat serving up several kinds of really well-made sandwiches for only $6 including tax and chips. Just arrive earlier than normal – 12:45 to 1:00 to get your order in. We have "last call" at 1:20 so Kat can be done making the lunches before we gavel the meeting to order. *Editor's note; I can attest that these sandwiches are fresh, generous, and very tasty. A very good and welcome service for the members.*

So as we begin this new year, I begin my second term as your 51st elected President. It's truly been an honor and a privilege to serve as president, and again be elected for the position. I've learned a lot during my first term, but the job of running your club truly is a team effort of 20 or 30 hard-working, diligent folks who really are the ones who make things happen and get things done. Without the help of so many of you, this club would not be the warm, inviting and vibrant community that it is. I'd like to express my deepest gratitude to all of you who do so much for the RCT.

And of course, if you've not yet taken on a specific role or responsibility and have a desire to do so, let us know! Several committees could use a few extra hands from time to time. Or perhaps you either have a skill in the realm of amateur radio - a knowledge, a talent, or know someone who does, we're always looking for presenters for the monthly general meeting. *Editor's Note; We will need a new Newsletter editor at the end of this year to start 2020.*

Let's make 2019 be a terrific new year for us all! Happy New Year, Radio Club of Tacoma.

73,
Dave W7UUU

FROM YOUR EDITOR

This month, January, marks the half way point of my tenure as the Logger's BARK editor. I originally volunteered for one year but took on a second 'term' because I found it fun, and interesting, and challenging. I still find it challenging, fun, and interesting but I also find that it has given me the opportunity to better know many more of our members and gain an insight into aspects of the club that everyday members may not experience.

But at the end of this year I intend to turn over editorship to someone who I am sure will bring new insight and a new perspective and a new 'look & feel' to the newsletter. I look forward to seeing and helping that person make the Logger's Bark their own… and better and more informative.

If you have a literary bent, enjoy interacting with other club members, and wish to add value to the club, and most of all gain a sense of real accomplishment, consider volunteering for the editor's position starting next January, 2020.

I can assure you that you will enjoy the experience and learn a great deal about the Radio Club of Tacoma.

ARRL Scholarships Available

The ARRL Foundation Scholarship program will accept applications from eligible applicants until January 31, 2019. All applicants must be FCC-licensed radio amateurs, and many scholarships have other specific requirements, such as intended area of study, ARRL Division, Section or state, and license class. Applicants should review the scholarships and check off the ones for which they are eligible. More information is on the ARRL Foundation Scholarship Program page. This year, the Foundation Board of Directors is offering several new scholarships. These include The Joel R. Miller (W7PDX) and Martha C. Miller STEM Scholarship, The East Coast Amateur Radio Service (ECARS) Scholarship, The Palomar Amateur Radio Club Scholarship, and The Dick Warren, K6OBS, Memorial Scholarship. http://www.arrl.org/scholarship-program

Communications Academy 2019

April 13-14 at South Seattle College. Save the Dates!

Communications Response to Catastrophic Events

A weekend-long training workshop for volunteer and other Emergency Communicators.

South Seattle College, Seattle, WA.

There is a plenary session each morning followed by a series of multi-track breakout sessions on:

· radio communications
· emergency management
· technical communications
· radio communications for new radio operators

Keynote speaker: Ross Merlin, Dept. of Homeland Security SHARES HF Program Director.

Registration for one or both days includes lunch.

Web page for further details: www.CommAcademy.org. Registration opens in late February 2019.

Regards,

Alan Jones, KD7KUS
17629 NE 138th St.
Redmond, WA 98052-1226
(h) 425-883-0405 (c) 425-736-4697

LUNCH is SERVED— $6.00

A sandwich lunch is now offered to the RCT members prior to the General Meeting every first Saturday. You have your choice of Ham, Turkey, or Egg Salad on several types of bread and a wide choice of condiments such as two types of cheese, lettuce, pickle, mustard, mayonnaise, and it includes a bag of chips.

All this for $6.00 - sign up / order before the meeting. A recurring order is also available.

Straight Key Night— 2018

One of the fun things the Radio Club of Tacoma sponsor's each year is the ARRL's Straight Key Night. Rich, KR7W and Randy, WB4SPB put in many long hours making repairs, tuning up, and dialing in the 'older' radio gear in the museum getting ready for this annual club event night. Thank you guys for your efforts that made it once again a great success.

This year saw a few more ladies attend than I have seen in the past. A welcome sight. Too often the ladies are not given the recognition they deserve. Many are not licensed but support their partners and we love to see that. The Lou

room served as the ladies gathering area and knitting was the order of the evening. I'm sorry I do not have pictures of the several other ladies present.

The 'class room' was again set up for the CW BINGO contest where a spirited group competed for prizes by copying the letters and numbers to mark their Bingo cards. There was also some light hearted CW sending on the extra large 'Left Foot' Key.

Around 1730 several varieties of pizza were served, complimented by many side dishes and scrumptious deserts brought in by the participants.

The usual suspects gathered around for radio gab sessions and everyone made themselves at home.

To accommodate darkness driving difficulties and other road dangers the SKN party broke up around 2100.

See the more in-depth article later in this issue.

HAPPY NEW YEAR!

Homebrew Key used in Straight Key Night

Sometimes super simple gizmos can attain some pretty cool results! The homebrew key in the photos below was loaned to me by Steve AD7VL to use for Straight Key Night 2019, both at the clubhouse as well as at home for the later hours of the SKN event. It turned out to be a very well-balanced, easy to use key in every way. I brought it to the clubhouse and used it for the contacts that I made using the Globe Champion transmitter in the Doc Spike Museum, and I had a great time!

Here's Steve's story about this key and how it came to be:

"In 2009 Rich Patrick KR7W challenged the membership to make a straight key of not less than 90% wood – and it had to be of original design. In early 2009 I had installed oak hardwood floors in my hallways at home and had a few pieces left over. I also had some ¼" Masonite material which was nice because it was finished on both sides.
So I cut up the flooring, and made two horizontal saw cuts to run wires on the bottom side. I drilled numerous holes as needed, finishing by using a 16-penny nail for the key's arm hinge shaft. Years later I realized the hot glue I had used to hold it all together had failed, so in 2018 I took this forgotten key out of the closet and reinforced it with 3 wood screws to make it usable again.
The key knob is from an ancient Atwater-Kent radio, and everything but the spring (found at Ace Hardware) came from stuff I had on hand. The contact for the key was made from a US Penny, so I called this the Abe Lincoln model.
Adjustment is simple: the gap adjusts by turning the nut on the top of the key. During assembly, the tautness of the spring can be adjusted to suit by shimming with washers or cutting the length of the stock spring. Once the tension is right, all that is needed is to turn the nut to set the best gap"

How cool is that? Steve says his key took the top spot in the little competition, and it only took him about 30 minutes to build. He also sent me a list of all of the parts needed to duplicate this key. It's in the form of a photo that I will happily email to anyone who asks. Just shoot me an email at W7UUU@W7DK.org and I'll get it sent to you.

A big thanks to Steve AD7VL for allowing me to use this awesome homebrew key during SKN, both at the clubhouse and then for the rest of the weekend at home.

Dave
W7UUU

RCT WINTER SALE 2019

	PRICE	RCT #
1. Millen Grid Dip Osc.	$150.00	3819
2. Tube Tester Meter	$ 10.00	
3. Meter Tube Tester Jewel	$ 10.00	
4. Heath Clock GS-1000	$ 150.00	3706
6. Hallicrafter S-38A Receiver	$ 30.00	3821
7. ICOM 440 mobile XCVR IC-410	$ 50.00	3519
11. Kenwood HF XCVR TS-450	$ 300.00	3389
12. MFJ Ant Tuner MFJ-986	$ 200.00	3825
14. W2THY Memory Keyer	$ 20.00	3759
15. Gonset 6 MTR XCVR COMM 3	$ 40.00	3637
16. Gonset HF SSB TX GSB-100	$ 100.00	3866
18. Yaesu HF PWR AMP FT-2100B	$ 400.00	3827
20. ICOM HF XCVR IC-725	$ 200.00	3810
21, Dentron Super tuner	$ 75.00	3646
22. wooden speaker	$ 10.00	
24. Kenwood Microphone MC-80	$ 60.00	3393
25. Kenwood XTAL Filter YG-455C-1	$ 75.00	3844
27. Battery Charger AT-5000	$ 30.00	3778
29. Shure Microphone	$ 30.00	3363
35. EICO HF XCVR 753/ with PS	$ 100.00	3867
38. ICOM UHF ALL MODE XCVR IC-471A RX OK, TX-0	$ 150.00	3830
41. Suitcase with Tektronix scope camera	$ 100.00	
42. Tekronix Oscilloscope 422	$ 50.00	3849
43. Tekronix Oscilloscope 547	$ 50.00	3850
44. HP VHF Signal Generator 608E	$ 50.00	3851
53. Drake XCVR TR-4	$ 225.00	3859
54. Drake power Supply AC-3 p/o 53		3860
56. HP Frequency counter 5230L	$ 75.00	3868
57. Triplett VOM 360	$ 100.00	3869
58. Kenwood HF XCVR TS-450S SN: 41200236	$350.00	3872
59. Kenwood HF XCVR TS-520SE SN: 732164	$200.00	3873
61. Drake HF RX R-4C SN: 18647	$ 100.00	3875
62. Drake HF XCVR TR-4 SN: 27035	$ 100.00	3876
63. HP Signal Generator 8640B SN: 1350A01429	$ 250.00	3878
64. HP Signal Generator 8640B SN: 1341A01172	$ 250.00	3879
65. ATO Interstate log sweep generator F77 SN: 941	$ 75.00	3880
66. Kenwood HF XCVR TS-520 SN: 40587	$200.00	3881
67. Kikusui COS Oscilloscope 6100M SN: 4041791	$ 150.00	3882
70. HP Frequency Counter 5328A SN: 2248A56070	$ 100.00	3885
71. Non-Linear Systems mini-scope MS-215 SN: 8314	$ 30.00	3886
72. Leader Bench power supply LPS-152 SN: 2030113	$ 100.00	3887
73. HP TRUE RMS METER 3403A SN: 1223A00525	$ 50.00	3888
74. Tektronix Storage scope/5-plug-ins 7834 SN: 8034906	$ 150.00	3889
75. Hammarlund HF RX Model SP-600	$ 50.00	3890
76. Kenwood HF XCVR TS-440S SN: 10600037	$300	3891

80. Yaesu HF XCVR FT-757GX/mic/mb	SN: 4H110753	$300/83-$350.00	3897
81. Yaesu VHF XCVR FT-2900/mic	SN: 2D400129	$ 100.00	3898
83. Tigertronics Signal Link USB-8R (Yaesu cable)		$ 75.00	3900
84. Comet Triplexer CFX-514		$ 50.00	3902
85. National HF Receiver NC-183D		$ 100.00	3904
86. Heathkit HF Transmitter DX-100		$ 80.00	3905
87. Astron power supply RS-35 M		$ 70.00	3341
88. Alinco VHF 2 meter mobile DR135MK3		$ 75.00	3908
89. Jetstream VHF 2/440 mobile JT270M		$ 40.00	3908
90. TEN-TEC Speaker model 307		$ 60.00	3911
91. TEN-TEC HF XCVR OMINI 6+		$ 900.00	3913
92. TEN-TEC XVRTR model 1208		$ 20.00	3912
93. TEN-TEC HF AMP Centurion/ PS # 94		$ 1000.00	3914
94. TEN-TEC Power Supply OMNI PS		P/O # 93	3915
95. TEN-TEC HF Tuner model 238		$ 250.00	3916
96. Kenwood HF XCVR TS 50		$ 200.00	3921
97. MFJ Ant Tuner MFJ-948		$ 75.00	3922
98. Astron Power Supply RS-35M		$ 70.00	3923

99. AS OF 01/09/2019 NEW ITEMS IN RED

Hungry as you make your way to the monthly meeting?

Starting with the January 2019 General Meeting, members will be able to order a sandwich lunch from a limited menu, prepared in the Eagles Club kitchen. The new menu features three types of sandwiches served on hoagie rolls, with a choice of condiments and cheese, all for only $6 including tax and a bag of chips of your choice. Gratuity is optional with a "tip jar" on the counter for Kat, our Eagles Club head chef on Saturdays. Sorry, but it's "cash only" - no cards or checks can be accepted.

Menu forms will be on the chrome lunch counter at the meeting, and orders are to be submitted no later than 1:00 PM so Kat has time to make them up. So if you plan to take advantage of this new lunch option, try to arrive a bit earlier than usual to get your order in.

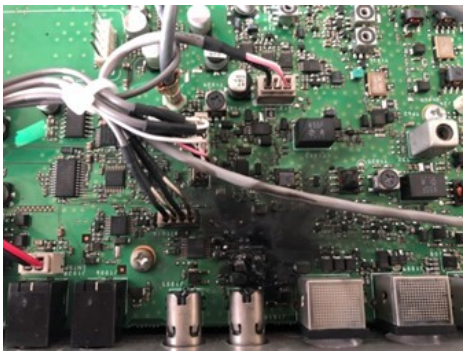
You'll also see a check box for "Recurring Order" on the menu form. If you check this box, Kat will keep your order on hand and always make up the same order for you each month! Sweet…!

RF Lab at the Clubhouse

In order to repair radio equipment, build circuits and test them, we need a work area, as well as tools, test equipment and supplies. There have been some changes at the clubhouse in the last few months. For those of you who have not visited the clubhouse recently, a table has been placed in the Lou room next to the HF station. This is the humble beginnings of an RF lab. Even in this simple state the work area (RF Lab) has been used for radio repair and electronic experiments. On the bench is W7XH Mike Isakson's Icom radio. The radio was experiencing thermal issues where the radio would work after warming up. Bruce WE7P was able to track down a cold solder joint of a surface mount diode to fix the problem.

Other repairs have taken place in the RF lab. According to Yaesu W7MKE's radio experienced a lighting strike. Among other things, one of the inner circuit paths was broken in the multi-layer main board. A jumper wire was put in place to repair the broken circuit board path. The radio is not completely fixed but its back on the air thanks to WE7P, WB4SPB and others! The PMT team has a Yeasu FL-2100B amplifier that is not transmitting on 80 meters. The problem was diagnosed as a burnt band switch. New band switches sell for $190 and used band switches are hard to find.

Newly organized RF Lab in the Lou room.



Left: Yeasu main board burned area.

Right: FL-2100B burnt band switch.

Test instruments and tools are required for electronic work. The RF lab has some basic equipment like jumper wires and an old oscilloscope. Today club members are bringing their own tools and test gear in to the lab when working on projects and then bringing the equipment home. Additional equipment is needed to expand the usefulness of the lab. Anyone who wants to donate tools and test equipment please let me know.

Adam C. Barbera – W2NCC

AMERICAN RADIO RELAY LEAGUE

RADIOGRAM

CITY OF ORIGIN	STATION	NUMBER
Tacoma, WA	W7OS	999T

TO:- **THE MUSEUM REPORT... JAN 2019** BY CUB REPORTER- KR7W

Straight Key Night was a success– as noted in another article in this newsletter.

The W7OS Museum has been participating in The **S**traight **K**ey **C**entury **C**lub's annual on-air event which commemorates the club's founding in 2006- directly following the ARRL Straight Key Night. At that time a group of SKN participants wanted to extend the fun of hand key CW throughout the year. **SKCC** is the result and **K3Y** is the special event call sign that is granted for this "**KEY**" event. This On the Air event is known as "K3Y" and runs from Jan 2nd through 31st. Click **HERE** for info.

There are K3Y operators in the ten US call areas, plus KH6, KL7 and KP4, along with associated DX stations in a number of Canadian provinces and each of six IARU continental regions. **W7OS** has been scheduled by Al N7OMS to operate as **K3Y/7** for 2 to 3 hours each Tuesday in January. If band conditions are good there could tens of hams calling to make contact with **K3Y/7/W7OS** for SKCC awards.

All interested folks are invited to stop by the clubhouse to operate the old W7OS radios with a straight key or sit back and observe. Dates & times at www.w7dk.org homepage.

The Museum staff hopes to restore this relic receiver which has been hiding on a library shelf for as long as I can remember. It's a Hallicrafters SX-9, built in 1934. The SX-9 was the first commercially mass produced radio receiver for consumers. This radio has been well taken care of and actually plays, but not very well. New parts will be installed soon and then a 'tune up'.

Stop by the Museum and take a looky.

REC'D AT STATION W7DK PHONE GR4-1232 TIME 1900

ADDRESS 1248 S Washington St, Tacoma, Wash DATE 5/1/55

This Message was transmitted free of charge by Amateur Radio Stations of the American Radio Relay League. Answer will be sent free by filing at this station.

FORM 4 PRINTED IN U.S.A.

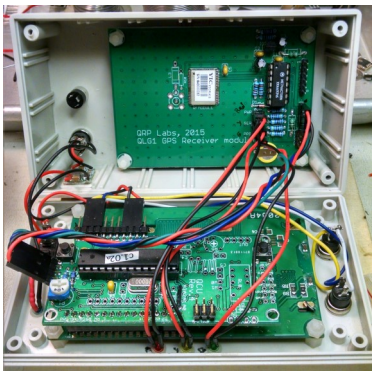
The Builder's Corner

This month's issue kicks off *The Builder's Corner* to highlight member's building projects. The club has so many members who love to design and build, assemble kit designs, repair old 'boat anchors', tune up and refurbish ham gear, and otherwise wield a soldering iron and they deserve a place to be recognized. I'll kick it off with my latest project, **The Shack Clock** by QRPLabs. Basic kit $19.00 Qrp-labs.com

The Shack Clock was designed by Hans Summers and is based on the same PCB as the Ultimate 3/3S QRSS/WSPR transmitter kit and uses special Firmware to provide the clock functions. Teamed with the OLG1 GPS kit, $23.00, it also provides GPS and satellite data location functions and precision time readouts. Two temperature sensors can also be connected. In addition it is preprogrammed to handle a 4 line by 20 character display instead of the supplied 2 line x 16 character display. There are 10 programmable alarms.

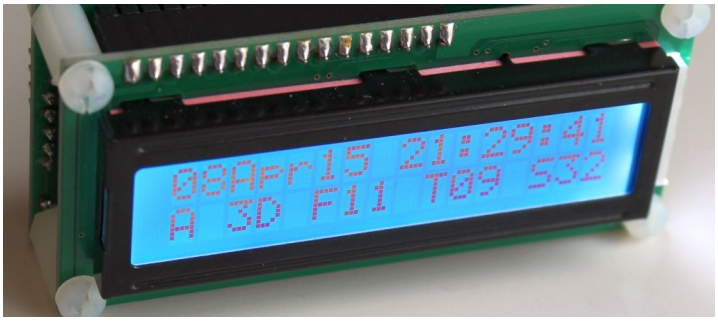
I opted to use the GPS kit and the 4 line display. I also added a jack for a future temperature sensor. It required about 3 hours of soldering time to build both kits, another 1 or 2 hours to wire up off-board switches and such, and a couple of hours to fabricate the case I used since I used headers and connectors as shown in the picture. One drawback I found was the "clean" 5 Vdc power supply required for optimum performance. My shack is almost all 12 Vdc so I installed a 'chicomm' 5 Vdc, 3 amp. buck converter. I have used these before and they work very well and are dirt cheap. Another area of concern if using the 4 line display or needing to change the display of the original is the 2 button programming system. It takes some getting used to and is tedious as heck but almost intuitive and you'll shortly get comfortable with it.

Notice the different display data on the two example displays. All information sent to the displays is configurable. The blue screen gives the date and time on line one and GPS satellite data on line two. The yellow/green screen displays the company name on line one, time and date on line two, callsign, grid square and temperature on line 3, and GPS data on line four. The display on my clock (left) is only partially complete as I was just getting a feel for setting my display to show my desired and formatted data.



Above left: My clock. The 3 LEDs upper center are GPS function indicators, Power, Serial data, and 1 PPS signal. Above right shows the GPS kit in the bottom, the display and clock processor in the lid laying flat.

Left: Supplied2 x 16 display. Right: User supplied optional 4 x 20 display. Firmware is set up to work with either.



A bit of nostalgia to bring in the new year.

1974

45 years ago this month: notes from *The Logger's Bark* , January 1974

- With this issue, the *Bark* begins its eleventh year in print.
- Doc Spike thanks the Novice members of RCT. In appreciation, they gave him a "lovely tie clasp engraved with my call, W7OS, on the crystal". Doc says "I shall wear it often, remembering my many contacts with you while you were novices."
- Members are encouraged to donate a pint to the Blood Bank at 22C South I Street. Three pints were donated in December. Donations are held in the RCT account for one year after donation and are available to members in time of need.
- 167 RCT and BEARS [the Boeing radio club] members submitted entries in the recent Sweepstakes contest. After a 5-year cumulative competition between the two clubs, it appears the BEARS will collect the CW trophy, but RCT might win the PHONE trophy. Claimed scores are so close that it will require waiting for the official ARRL results to decide the winner.
- The daughter of the late Randolph E. Hessey [not a ham, but a radio hobbyist and experimenter] has donated to the RCT Museum a "very wonderful Stromberg Carlson Neutrodyne Receiver". She has also donated to the Library Mr. Hessey's "Rider's Manuals" and other books.
- In the minutes of the November 28, 1973 General Meeting, the Treasurer reported that the club had a combined total of $1152.98 in the Checking, Savings and Building Fund accounts. [In 2019 dollars, that's about $5875.]
- The Tacoma repeater on 04/64 has been relocated to the QTH of Mac W7FAB. "With the new location and pre-amp on it, it really covers the area like a blanket."
- Joe Winter, WA7RWK began his term as newly-elected President of the club.

The current General Availability (GA) release is *WSJT-X* 2.0.0

The FT8 and MSK144 protocols have been enhanced in a way that is not backward compatible with older program versions. The new protocols become the world-wide standards starting on December 10, 2018, and all users should upgrade to *WSJT-X 2.0* by January 1, 2019. After that date, only the new FT8 and MSK144 should be used on the air.

source of info from Joe Taylor's website http://physics.princeton.edu/pulsar/K1JT/wsjtx.html

2019 Straight Key Night Report by Cub Reporter– KR7W

RCT President Dave, W7UUU makes the first QSOs of the event at 0000 UTC / 4 pm PST.

Dave is using the 80M CW station set up in the Museum – A Collins 75A4 receiver and the big Globe Champion Transmitter to make 3 QSOs.

There's a Hallicrafters HA-1 Keyer and Drake Wattmeter assisting.

Welcoming in the NEW YEAR at W7OS

This second station was set up in the HF room to operate on 40 Meters.

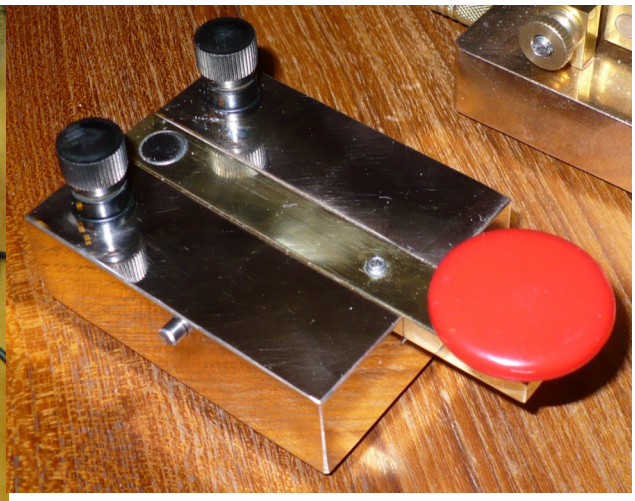
L-R: Heathkit VF-1 VFO, Drake 2NT Novice Transmitter, Drake 2B Receiver with 2BQ Q-Multiplier.

Unfortunately– the 40M band went dead early in the evening– so only 1 QSO was made with a Tacoma ham.

Here's Chris, N7CPM using the Globe Champ station on 80M.

Chris, a ham fairly new to CW/ Morse Code has become a boat anchor radio fan. Chris made 2 QSOs.

The Straight Key Night organizers requested that folks bring in their favorite key(s) to show off and for others to try out. Amongst the nice collection of keys, as always, there's chit-chatting going on.



These nice keys were brought in by Phil K7PIA. L to R: Brand new blingy brass SK, a Heavy Duty Vibroplex SK, and a plastic 3D printed key on an aluminum base. The 3D key had a surprisingly good feel to it– in this reporters opinion. Sorry– no photos of the other keys.

Your reporters favorite key was built by club member PJ, N7PH, a hobbyist machinist. PJ's key was a heavy solid brass block with brass lever. PJ used magnets to create the spring action. I am sure your opinions differed and/or YMMV. *Editor's Note; I added a picture of my Key on the right since Rich mentioned it.*

At 5:30 PM, pizza was served– along with many desserts, veggie plates, and fruit plates.

Around 7 PM, Hosts Nick K7MO and Anna K7ANA called the numbers for Morse Code Bingo. The overall winner of Starbuck gift cards was Phil K7PIA who won 3 rounds.

This year– there didn't seem to be as many guests, but it looked like all attendees had a good time. It seemed like the pizza was tastier this year.

A total of 8 QSOs were made. 7 QSOs on 80M, 1 on 40M. Band conditions were poor with high noise levels- to say the least. Radio operators were: Nick K7MO, Radik KG7HWU, Rick KR7W, Randy WB4SPB, Pres. Dave W7UUU, and Chris N7CPM.

Looks like the furthest QSO was made to MN. Least far QSO was from Tacoma. Also club member Bob K7MXE– near Alder Lake made QSO with W7OS.

The next SKN will be announced in 10 months. So stay tuned.

Best Regards- Rich KR7W

Amateur Radio Emergency Service (ARES)
Western Washington Section
District 5, Pierce County ARES
www.PierceCountyARES.net

Greetings,

ARES articles provide information about amateur radio emergency communications, and Pierce County District 5 ARES activities and events. Amateur Radio Emergency Service (ARES) is an ARRL organization dedicated to Amateur Radio Emergency Communication through skill and preparedness.

When You Need Amateur Radio, You Really Need It!

The Background…

Pierce County ARES manages local ARES activity, training, exercises, and skill development. Pierce County ARES supports and meets at the Pierce County Emergency Operations Center.

Street Sense for Emergency Communication

(From the ARRL/ ARES E-Letter January 19th)

Duane Mariotti, WB9RER, has spent 30 years as a biomedical engineer supporting hospitals, has been involved in communications during numerous disasters, and is currently the coordinator of the Kaiser Permanente Amateur Radio Network (KPARN) in California. KPARN is an organization of Amateur Radio operators who volunteer time and technical expertise to support the emergency preparedness mission of Kaiser Permanente Health Systems through redundant communication technologies.

He wrote the following disaster response tips, based on his extensive experience.

1. We are not first responders. The disaster will last - drive safely to your assigned location.

2. We need to "lean forward" at times -- lean forward to prepare to respond. Listen on the designated response frequency. Have gas in your car, etc..

3. Safety is always priority number one - “do it safely or do not do it”. Hazardous work situations involve setting up antennas, working around downed wires, walking in water (holes, currents, etc.) and so on.

4. Dress appropriately - make a positive first impression versus an impression.

5. Know your area's risks and their scope - The Midwest has tornadoes and floods; California has earthquakes and wildfires; the Gulf States and eastern seaboard have hurricanes and Nor'easters.

6. Fit training to your assignment: If you serve Red Cross shelters, know their requirements in advance of need -- minimal training may be acceptable, but you need to be sure. If you are supporting a hospital or an EOC, different and possibly more demanding tool and skill sets may be required. EOC and hospital staffs have people who work together routinely -- you are the outsider who needs to integrate with them and know what they want.

7. You cannot just show up at the hospital and use your radio -- they have special regulatory requirements for all staff and volunteers. You may need to be pre-certified with orientation, HIPAA requirements and other subjects.

8. Remember, we are an invited participant to support responses and events; managers can always not invite us.

9. Get the message across -- sometimes it is easier to hand the microphone to the shadowed official and let them talk to the other end.

10. Since 9/11 there are entire college curricula to teach and train students in emergency management. There are now many professional emergency managers with Master's degrees managing incidents, not the old sheriff or fire chief of a generation ago. Accordingly, new generation managers expect more from their staffs and volunteers, including radio operators.

ARES activities: Pierce County ARES teams conducted a morning statewide Emergency Communications Exercise on 31 December.

Coming Events/Training:

(Unless otherwise indicated location is Pierce County Emergency Operations Center)

The January 26th Saturday Training Session will be an all day major event focusing on Leadership.

Topics Include:
1. Intro/Orientation to Leadership organization .
2. Leadership: What the heck is it?
3. So you made me an Emergency Coordinator/Radio Operator, now what?
4. Training (Internal/External) .
5. Exercises (Program, Design, Planning, and Conduct) .

ARES Meetings:

Pierce County ARES Meets Monthly, at 7 pm on the Third Thursday at the Pierce County Emergency Operations Center. Meetings always have a program, with a EmComm Training Focus.

Pierce County District 5 Website: http://www.piercecountyares.net/web

ARES Membership Application: http://www.piercecountyares.net/web/application

ARES Facebook Page: https://www.facebook.com/groups/PierceCountyARES/files/

Washington State Emergency Management: https://www.facebook.com/WashEMD/

ARES Information and Communications Plan frequencies:

For ARES Team, EOC frequencies, and other ARES activities you may also use the following W7DK.org Website, using the following link:

http://www.w7dk.org/index.php?option=com_content&view=category&layout=blog&id=46&Itemid=111

Larry Watson, KD4VOM

Pierce County ARES

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This and That

Youth Ham Radio Learning

As I am developing lesson plans to engage the curiosity and understanding of young Explorer Scouts, I will be looking for help with donations for some unusual stuff. At the moment I am seeking a cone style megaphone, something like a shell-racing coxswain might use at U of W rowing competitions. A larger megaphone like a sports cheer leader might use, could also work but smaller is probably better. The learning opportunity lies in the hands-on experience of hearing the effect of amplification. Technically, the cone is only passive and directive to the flow of sound waves, not an active device. Active amplification provides a replication of input energy that has more energy than the input. I expect the cone will be a great conversation starter. I will also have at the ready an active Microphone, Preamp, Amplifier and Speaker. From here springs the concepts of voltage, current, AC current, load, and coupling energy from a source to a load. And the concept of resonance, both mechanical and electrical. Rich, KR7W donated one of his prototype tuned Morse code speakers to work with. It should be great fun in hearing resonance.

Later on, the cone megaphone will be a good place to conceptualize how a Uda-Yagi (think 2M Tape Measure Fox Hunt Beam) antenna provides forward gain, with a front to back ratio. My hope is to create a highly tactile environment that creates fun and simultaneously encourages youthful curiosity into "How Things Work". "Figuring out how thing work" will be an ongoing theme.

So if you have some ideas about models, or ideas for physical-tactile props for demonstrating and engaging youth into electronic Ham Radio concepts I would love to hear from you.

Hot Air Soldering

Ever wonder how "they" repair circuit boards with Surface Mount Technology Components (SMT)? These are the really tiny parts that are soldered directly to the surface of a circuit board. The SMT integrated circuits may have many leads on each side all soldered in very close spacing, think magnifying glass close. To date, most ham radio home brew projects that use circuit boards use thru-hole mounting, the parts are larger and soldering irons work well. However, most of our purchased transceivers and gear of today use a lot of SMT technology. Some home brew kits are available in both SMT and Thru Hole. Towards learning about working with SMT soldering I recently purchased a hot-air soldering system. It also turns out that Dan Vacanti, KG7DWF also has a hot-air system (no puns allowed here).

If you are interested in Home Brew Radio and learning about hot air soldering, mark your calendar for April 24, the 4th Wed at W7DK clubhouse. Dan and I will present a workshop where we will have two hot-air soldering tools and plenty of scrap circuit boards to play with so everyone can get some hands-on practice using hot-air wands.

A BIG *HATS OFF* to RE-PC Recycled Computers & Peripherals , (Park E, 600 Andover, Tukwila) and STEPP IR, (the really cool tuned Ham antennas) of Bellevue for donating plenty of scrap pc boards for us to practice with. THANK YOU!

That's *This and That* for now.
Hope you found something to think about. Topic Suggestions & Feedback Welcome.

73's, Steve AF7YD.

W7DK Scores 2nd Place in ARRL's September VHF Contest by Cub Reporter– KR7W

The mighty DK came in ***second place*** in the ***WWA section*** and in its Class of ***Multi-Operator using 4 or Less Bands.*** W7DK's team of operators made 23 QSOs with 11 multipliers for a total score of 253 points– according to ARRL contest stats webpage. The DK team participated in the comfort of the clubhouse using the Yaseu 847 VHF 100 watt station that is attached to 6, 2, and 430 MHz horizontal Yagis for CW and SSB work and a 3 band ARES like vertical ground plane antenna for FM communications.

However, the first place finisher in the WWA Section and in the same class as W7DK was little ole WW7LW– The Mt Rainier ARC operating at 7 watts or less, on battery power, using homebrew antennas from the top of Mt Fremont (7250 ft. elev. in Mt Rainier National Park) with a 'baby it's cold outside' temperature of 38 deg. F. WW7LW squeaked by DK in a photo finish of 23 QSOs– with 12 multipliers accrued– which adds up to 288 points.

Photo Finish photos: Left: WW7LW's homebrew antenna farm. Right: WW7LW op Mike W7MKE at 6 meter SSB station. More info on WW7LW's contest effort can be found in the **DEC 2018 Bark** (click link). Unfortunately, no photos of W7DK's contest effort were provided to this reporter.

BOYS' LIFE for NOVEMBER, 1958
Billy Hallicrafters "AIRWAVE PATROL"
BILLY AND A FRIEND ARE SECURING THEIR BOAT...
GEE BILLY, THAT STORM SURE CAME UP FAST! HOPE THE FISHING FLEET'S O.K!
LOOKS LIKE A BAD ONE TIM. LET'S GO TUNE IN THE MARINE FREQUENCIES ON MY HALLICRAFTERS SHORT WAVE SET!
WOW! YOU MEAN YOU CAN ACTUALLY LISTEN TO THE FLEET TALKING?
SURE--NOT ONLY SHIPS BUT POLICE... FIRE... AMATEURS... PLANES... FOREIGN STATIONS... LOTS OF STUFF
BOY, THAT REALLY SOUNDS EXCITING! WHAT'S THAT?
I'M ON AN INTERNATIONAL EMERGENCY FREQUENCY-HOLD IT--GET THIS
NA-6 TO COAST GUARD! WE'RE AGROUND ON A REEF... SINKING... SEND HELP...!
YES SIR, ONE OF THE FISHING BOATS. SHE'S ON A REEF 40 MILES SOUTH OF POINT ENDS... MAN INJURED TOO!
GOOD WORK SON! WE DIDN'T PICK UP THEIR S.O.S. WE'LL SEND A CUTTER, AND THERE'S A PLANE IN THE AREA TOO.
20 MINUTES LATER.... THE STRICKEN VESSEL IS SPOTTED
HUNTER 26 TO RESCUE 404... THERE SHE IS! ON THE ROCKS! DECKS AWASH! STEER 195° OVER...
ROGER 26 STEERING 195° KEEP HER IN SIGHT!
THANK GOODNESS SOMEONE HEARD OUR S.O.S. SHE'S BREAKING UP FAST!
EASY MEN, THIS MAN'S BADLY INJURED!
THE FLEET'S MIGHTY GRATEFUL TO YOU BILLY! THIS PROVES SHORT-WAVE LISTENING IS EXCITING FUN AND USEFUL AS WELL
WE ORDERED AN AMBULANCE SIR-- JUST IN CASE!
I'M GOING TO GET A HALLICRAFTERS SHORT WAVE SET TOO!
You hear more wonderful things on
MODEL S-38E. Latest model of Hallicrafters' most popular short wave receiver. Hear standard broadcast plus three short wave bands (1.650 k.c. to 32 mc.). Rich-toned, 5" speaker, phone jack. Handsome grey steel cabinet, silver trim, $54.95. Blonde or mahogany finish with gold trim also available, $59.95
MODEL S-53A. Beautiful receiver with standard broadcast plus four short wave bands covering all the exciting events on emergency frequencies . . . foreign stations . . . amateurs. Phono and headphone jacks, 5" PM speaker. Sensitivity and tone controls. Satin black finish. $89.95
hallicrafters short-wave sets!
4401 W. Fifth Ave., Chicago 24, Ill.
Yours free!
"The Amazing World of Short Wave Listening"
Learn all about short wave! How it works . . . where and when to listen to foreign, amateur, emergency, military stations . . . plus international time map . . . frequency spectrum . . . etc.
NAME
ADDRESS
CITY STATE
Available with convenient terms from your Radio Parts Distributor
Export Sales: International Division, Raytheon Manufacturing Co., Waltham, Mass.
XR

Radio Club of Tacoma
General Meeting Minutes
December 2, 2018

The December General Meeting was held in conjunction with the Radio Club of Tacoma Holiday Banquet and Awards Ceremony on December 2, 2018 at the Eagles Club South on at 7037 S Pine St. , Tacoma, Washington. At the conclusion of the banquet, the **Meeting was called to order** at 1532 PST by President Dave W7UUU.

Officers and Directors Present

President	Dave Ellison W7UUU
Vice President	Mike Mikuchonis W7XTZ
Secretary	Mike Finnie W7MWF
Treasurer	Steve Dightman AF7YD
Board	Red Cranefield WB7EC
Board	Phil Pia K7PIA
Board	Adam Barbera W2NCC
Board	Bruce Hanson WE7P

Welcome President Dave welcomed those in attendance and announced that the General Meeting would be limited to only a few essential topics.

New Calls Dan KG7DWF/AE announced his recent elevation to Amateur Extra Class. Dan gave high praise to Dave N7HT for his instruction in successfully completing the testing requirements.

Health and Welfare

Silent Keys and Illness It was announced that George K7GRS's sister had passed away last week. Our condolences to George and his family.

Committee / Activity Reports

Steve Blacksten AD7VL reported the success of the Boy Scout Camporee and the Club's efforts to help get multiple Scouts on the air at the event.

New Business

President Dave announced that an arrangement had been made with the Eagles Aerie #3 on South Tacoma Way to make sandwiches available for purchase during our regular monthly meetings on the first Saturday of each month.

Tuning and Traffic

Phil K7PIA reported multiple 160 meter QSOs during a recent contest. Chris N7CPM and Dave W7UUU reported their recent activity collecting QSOs from rare states during the same contest

There being no further business, the meeting was **Adjourned** at 1545 PST.

Radio Club of Tacoma
Board of Directors Meeting Minutes
December 5, 2018

Meeting called to order at 1900 PST by President Dave W7UUU.

Officers and Directors Present

President	Dave Ellison W7UUU
Vice President	Mike Mikuchonis W7XTZ
Secretary	Mike Finnie W7MWF
Treasurer	Steve Dightman AF7YD
Board	Bruce Hanson WE7P
Board	Adam Barbera W2NCC
Board	Red Cranefield WB7EC
Board	Phil Pia K7PIA

Quorum A quorum was seated. There were 13 names on the attendance roster, a copy of which is filed with these minutes.

Silent Key or Illness None reported.

Minutes of the November 7, 2018 Board Meeting were approved as circulated.

Secretary's Report Mike W7MWF reported usual Correspondence received: Subscriptions, utility bills, bank statements, dues renewals and new members. Liability and equipment insurance policies received. Equipment policy increased $30 from $323 to $353 due to adding Flex 6500 to coverage.

Treasurer's Report Steve AF7YD presented his regular report and advised that migration from *MS Money* to *Quickbooks* was underway. Steve passed around a list of his proposed accounting classifications for board input. A copy of Steve's proposed classes is filed with these minutes. Mike W7MWF reported that 2 dormant checking accounts (Flea Market and VE) at Chase have been closed and the balances in those accounts transferred to the regular savings account. The Internet account remains intact for future use with EBay sales or purchase transactions.

Presentation of Awards Dave W7UUU distributed awards that were not presented at Banquet to George KR7GRS and Peter AD7EU. Also, date corrected certificates for the President's Awards have been prepared and have or will be presented as appropriate.

Special Report - Youth Training Steve AF7YD introduced representatives of the Boy Scout Council – Mark Woodman, a club member, and Scout Leader Steve Shumaker K7DFC. The guests gave an overview of the Exploring Club (EC) program and how it could be a valuable tool for teaching youth about electronics, ham radio, and other useful skills. They offered the Radio Club (RCT) the opportunity to apply for a charter as a sponsoring organization to enable formation of one or more ECs. The cost to the RCT would be $40 for insurance coverage and designation of a liaison representative. The guests fielded questions from the board members and the audience at large.

Discussion followed and a motion was subsequently made and seconded that RCT should apply for a charter and designated Steve AF7YD as the RCT liaison. Steve accepted. The motion also included the expenditure of $40 with the understanding that it would be an annual fee. The motion passed.

Committee / Reports

Membership George K7GRS and Mike W7MKE reported that current member count is 281 and renewals continue to roll in. An additional donation to the Salmon Run fund drive was received at the banquet.

Training

Tech License Training – no class until January 2019
VE Testing next session December 11
License upgrade class (Extra) will be in session on Monday nights through 12/10
Dave N7HT planning General Class License training January 17 – March 21 (Thursday nights)

Info Tech Randy WB4SPB submitted a formal report outlining the condition of the club infrastructure and future issues regarding obsolescence that we will need to address. A copy of Randy's report is filed with these minutes.

HF Operations (K7PIA)

Status of HF Equipment is in good shape. A trouble ticket has been opened with Flex regarding the 6500 to address some possible issues with the unit.

Past contest reports and upcoming contests were mentioned.

Upcoming contests were discussed.

Follow-up KR7W concerns regarding Flex transciever include further analysis and having opened a trouble ticket.

Repeater Ops Operations appear to be normal with the repeaters. Randy has reconfigured the IRLP setup so that the touchtone codes are no longer audible.

Property Mgmt. Red WB7EC reported that raffle sales at the banquet generated $223. Red also submitted a list (a copy of which is filed with these minutes) of 6 surplus items for disposition. It was moved, seconded and passed to authorize the disposition of the six items in accordance with club policies.

Facilities Management Adam W2NCC reported installation of new light tubes throughout the clubhouse. The man-door in the garage still needs trimming and a few other tasks. Permitting for the upstairs electric panel replacement has been arranged, a parts list is being developed, and Al N7OMS has committed to be responsible for acquiring the parts. Adam also reported that the rodent problem is ongoing but some progress is being made.

Museum Randy WB4SPB reported that Straight Key Night will be held New Year's Eve, December 31st from 4:00 p.m. until 9:00 p.m., with pizza being served at 5:30 p.m. CW Bingo is still up in the air. The rigs that will possibly be used this year are the Globe Champ paired with the Collins 75A4 and a Heathkit transmitter paired with a yet undetermined receiver.

Weds Workshop Because of the proximity of the 4th Wednesday to Christmas and Straight Key Night, it was decided that there would be no workshop this month.

General Meeting The December General Meeting was combined with the banquet and awards ceremony held on December 2, 2018. Dave W7UUU reported at the General Meeting that arrangements had been made with the cook at Eagles Aerie #3 that lunch sandwiches will be available for purchase in conjunction with our meetings beginning in January.

Unfinished Business

Adam W2NCC advised that another bulk purchase totaling about $6,000 is about ready to go to MFJ.

There was limited discussion on outbuilding proposals and options. The alternatives will be r viewed and the topic will be acted upon after the first of the year. The board thought it prudent to first review the year-end financial statements and to wait for suitable weather and time availability due to upcoming holidays.

New Business

George K7GRS brought up several member ship issues regarding how we classify members during tabulation reports. It was decided that paid up members will henceforth be called 'current members' and members whose memberships have expired will be called 'lapsed members'. George also sought guidance from the board as to how family memberships might be handled in the event that the sponsoring full member obtained Silent Key status. It was the consensus of the Board and of the club members in attendance that the surviving spouse should be permitted to retain their reduced-rate family membership status. This policy will be implemented immediately and will be revisited in the future if necessary.

Activity Reports and Discussion Topics

Report on Holiday Banquet held Sunday, December 1. It was deemed to be a huge success in the areas of venue, food, and ceremonial functions. The same venue at the Eagles club on Pine Street has already been reserved for next year on the first Sunday of December. It was moved, seconded and passed to confirm the reservation and to authorize the expenditure of $250 for the rental of the facility.

Adjournment There being no further business the meeting was adjourned at 2032 PST.

The Club LINEUP

Club Officers

President: Dave Ellison, W7UUU - w7uuu@w7dk.org

Vice Pres: Mike Mikuchonis, W7XTZ - w7xtz@w7dk.org

Secretary: Mike Finnie, W7MWF - w7mwf@w7dk.org

Treasurer: Steve Dightman, AF7YD - af7yd@w7dk.org

5 Board Members

Bruce Hanson, WE7P - we7p@w7dk.org

Paul Matney, W7PFU - w7pfu@w7dk.org

Adam Barbera, W2NCC - w2ncc@w7dk.org

Red Cranefield, WB7EC - wb7ec@w7dk.org

Phil Pia, K7PIA - k7pia@w7dk.org

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Permission is granted to use any or all portions of articles published in The Loggers Bark. If a credit line is included in the article, please seek permission from the original writer also.

Membership Info: FULL (licensed) and ASSOCIATE (non licensed) is $35 per calendar year. $30 for Licensed Seniors (65 and over). Licensed family members at same address pay $20 each for the first two and are free for the third, fourth, and so on. Full-time students, licensed or non licensed, up to age 25 are $20 per year. Note: fees are applicable for the calendar year: Jan to Dec. Lifetime membership is 20 times the yearly fee you are eligible for.. Lifetime memberships are calculated based on the FULL and ASSOCIATE rates.

www.w7dk.org - For the latest and most current information on events and activities, visit the Radio Club of Tacoma Website.

Radio Club Repeaters

Central Tacoma: 147.280 + PL=103.5

Crawford Mountain 147.380 + PL=103.5 (E of Olympia @ 1500 ft. ASL)

Central Tacoma: 440.625 + PL=103.5

North Tacoma: 145.21 – PL=141.3